private address format in an AdvA field of either the Bluetooth Low Energy ADV_IND_PDU packet or the Bluetooth Low Energy ADV_SCAN_IND_PDU packet.

**[0025]** According to an example embodiment of the invention, a method comprises:

**[0026]** wherein the wireless discovery request packet is a SCAN_REQ PDU packet and the indication associated with the service on which the determination resulted a match is a non-resolvable private address format in a ScanA field of the SCAN_REQ PDU packet.

**[0027]** According to an example embodiment of the invention, a method comprises:

**[0028]** waiting, by the apparatus, for a wireless discovery response packet including the indication associated with the advertised service on which the match occurred.

**[0029]** According to an example embodiment of the invention, an apparatus comprises:

**[0030]** at least one processor;

**[0031]** at least one memory including computer program code;

**[0032]** the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus at least to:

**[0033]** insert an indication associated with a service available from the apparatus to an apparatus address field of a wireless advertisement packet; and

**[0034]** transmit the wireless advertisement packet including the inserted indication associated with the available service.

**[0035]** According to an example embodiment of the invention, an apparatus comprises:

**[0036]** wherein multiple different services available from the apparatus are published by at least one of sequentially transmitting multiple wireless advertisement packets advertising the multiple different services, including respective indications associated with the multiple different services, and transmitting one or more wireless advertisement packets including multiple indications associated with the multiple different services in a data field.

**[0037]** According to an example embodiment of the invention, an apparatus comprises:

**[0038]** wherein the apparatus address field is a non-resolvable private address format in an AdvA field of either the Bluetooth Low Energy ADV_IND_PDU packet or the Bluetooth Low Energy ADV_SCAN_IND_PDU packet.

**[0039]** According to an example embodiment of the invention, an apparatus comprises:

**[0040]** the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus at least to:

**[0041]** receive one or more wireless discovery request packets in response to the transmitted wireless advertisement packet;

**[0042]** determine whether any of the received wireless discovery request packets matches with one or more services available from the apparatus by filtering sender address field indication of each of the received one or more wireless discovery request packets with service identities corresponding with the one or more services available from the apparatus; and

**[0043]** transmit a wireless discovery response packet in response to the received wireless discovery request packet including an indication associated with the service on which the determination resulted a match.

**[0044]** According to an example embodiment of the invention, an apparatus comprises:

**[0045]** at least one processor;

**[0046]** at least one memory including computer program code;

**[0047]** the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus at least to:

**[0048]** maintain one or more service identities of services the apparatus requires;

**[0049]** receive a wireless advertisement packet including an indication in a sender address field of the wireless advertisement packet associated with a service available in a source apparatus of the wireless advertisement packet;

**[0050]** determine whether the service indicated available in the received wireless advertisement packet matches with any of the one or more services requested by the apparatus by filtering the sender address field indication of the received advertisement packet with the maintained one or more service identities; and

**[0051]** transmit a wireless discovery request packet including an indication associated with the service on which the determination resulted a match.

**[0052]** According to an example embodiment of the invention, an apparatus comprises:

**[0053]** wherein the wireless advertisement packet is a Bluetooth Low Energy ADV_IND_PDU packet or a Bluetooth Low Energy ADV_SCAN_IND_PDU packet and the sender address field of the advertisement packet is a non-resolvable private address format in an AdvA field of either the Bluetooth Low Energy ADV_IND_PDU packet or the Bluetooth Low Energy ADV_SCAN_IND_PDU packet.

**[0054]** According to an example embodiment of the invention, an apparatus comprises:

**[0055]** wherein the wireless discovery request packet is a SCAN_REQ PDU packet and the indication associated with the service on which the determination resulted a match is a non-resolvable private address format in a ScanA field of the SCAN_REQ PDU packet.

**[0056]** According to an example embodiment of the invention, an apparatus comprises:

**[0057]** the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus at least to:

**[0058]** wait, by the apparatus, for a wireless response packet including the indication associated with the available service on which the match occurred.

**[0059]** According to an example embodiment of the invention, a computer program product comprises computer executable program code recorded on a computer readable non-transitory storage medium, the computer executable program code comprising:

**[0060]** code for inserting, by an apparatus, an indication associated with a service available from the apparatus to an apparatus address field of a wireless advertisement packet; and

**[0061]** code for transmitting, by the apparatus, the wireless advertisement packet including the inserted indication associated with the available service.

**[0062]** According to an example embodiment of the invention, a computer program product comprises:

**[0063]** code for receiving, by the apparatus, one or more wireless discovery request packets in response to the transmitted wireless advertisement packet;